

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A suction device for use with an electrophysiology device, the electrophysiology device including a shaft carrying an operative element, and defining an internal fluid lumen and a fluid outlet, the suction device comprising:

a main body, a suction line extending through the main body;

at least one suction pod, defining a suction region being defined within the at least one suction pod and being connected to the suction line through a suction aperture formed through the at least one suction pod; and

a connector configured to removably secure the shaft of the electrophysiology device to the suction device such that the shaft extends through the suction region and the fluid outlet defined by the shaft is within the suction region.

2. (Currently Amended) A suction device as claimed in claim 1, wherein the at least one suction pod comprises a plurality of suction pods, a suction region being defined within each suction pod defining a respective suction region and being connected to the suction line through a suction aperture, the shaft extending through a plurality of suction regions.

3. (Currently Amended) A suction device as claimed in claim 1, the suction line being further comprising: a suction line configured to be connected to a suction source; and at least one aperture that connects the suction line to the at least one suction pod.

4. (Original) A suction device as claimed in claim 1, wherein the at least one suction pod comprises a flexible suction pod.

5. (Original) A suction device as claimed in claim 1, wherein the connector comprises a slot.

6. (Currently Amended) A suction device as claimed in claim 1, wherein the shaft of the electrophysiology device defines ~~includes~~ a plurality of fluid outlets, the at least one suction pod comprises a plurality of suction pods, each suction pod defining a respective suction region connected to the suction line through a suction aperture, and the connector is configured to removably secure the shaft of the electrophysiology device to the suction device such that the shaft extends through a plurality of suction regions, and each fluid outlet defined by the shaft is within a respective suction region.

7. (Currently Amended) A suction device for use with an electrophysiology device, the electrophysiology device including a shaft carrying an operative element, the suction device comprising:

a main body, a suction line extending through the main body;

at least one suction pod defining a bottom surface ~~and, at least one suction region being defined within the at least one suction pod and being connected to the suction line through a suction aperture formed through the at least one suction pod; and~~

a connector configured to removably secure the shaft of the electrophysiology device to the suction device such that a portion of the shaft extends through the at least one suction region and electrophysiology device extends below the bottom surface of the suction pod.

8. (Currently Amended) A suction device as claimed in claim 7, wherein the at least one suction pod comprises a plurality of suction pods, a suction region being defined within each suction pod defining a respective suction region and being connected to the suction line through a suction aperture, the shaft extending through a plurality of suction regions.

9. (Currently Amended) A suction device as claimed in claim 7, the suction line being further comprising: a suction line configured to be connected to a suction source; and at least one aperture that connects the suction line to the at least one suction pod.

10. (Original) A suction device as claimed in claim 7, wherein the at least one suction pod comprises a flexible suction pod.

11. (Original) A suction device as claimed in claim 7, wherein the connector comprises a slot.

12. (Currently Amended) A suction device as claimed in claim 7, wherein the connector is configured to removably secure the ~~shaft electrophysiology device~~ to the suction device such that the portion of the ~~shaft electrophysiology device~~ extends about 0.5 mm below the bottom surface of the suction pod.

13. (Currently Amended) A suction device for use with an electrophysiology device, the electrophysiology device including a shaft carrying at least one operative element, the suction device comprising:

a main body, a suction line extending through the main body;

two longitudinally spaced suction pods, a suction region being defined within each suction pod and being connected to the suction line through respective suction apertures defined by respective suction pods; and

a connector configured to removably secure the shaft of the electrophysiology device to the suction device such that the shaft extends through the suction regions, and a substantial majority of the operative element carried by the shaft is between the suction regions ~~the suction pods~~.

14. (Currently Amended) A suction device as claimed in claim 13, ~~further comprising: a the~~ suction line being configured to be connected to a suction source; ~~and two apertures that respectively connect the suction line to the two suction pods.~~

15. (Original) A suction device as claimed in claim 13, wherein the suction pods comprise flexible suction pods.

16. (Original) A suction device as claimed in claim 13, wherein the connector comprises a slot.

17. (Currently Amended) A suction device as claimed in claim 13, wherein the shaft of the electrophysiology device includes a plurality of longitudinally spaced operative elements ~~supported on a support body~~ and the connector is configured to removably secure the shaft ~~electrophysiology device~~ to the suction device such that the shaft extends through the suction regions, and respective portions of the ~~shaft-support body~~ between the longitudinally spaced operative elements are aligned within the suction regions defined by the suction pods.

18. (Currently Amended) A system, comprising:
an electrophysiology device including a support structure carrying; at least one operative element and defining ~~carried on the support structure, an internal~~ fluid lumen and a fluid outlet;
and

a suction device including

a main body, a suction line extending through the main body,

at least one suction pod ~~defining~~, a suction region being defined within the at least one suction pod and being connected to the suction line through a suction aperture formed through the at least one suction pod, and

a connector that removably secures the support structure ~~electrophysiology device~~ to the suction device;

wherein the electrophysiology device and suction device are respectively configured such that the support structure extends through the suction region, and the fluid outlet defined by the support structure is within the suction region.

19. (Currently Amended) A system as claimed in claim 18, wherein the electrophysiology device defines a distal end, the connector comprises a slot defining a distal end, and the electrophysiology device and suction device are respectively configured such that the fluid outlet is within the suction region when the distal end of the electrophysiology device is adjacent to the distal end of the slot.

20. (Canceled).

21. (Currently Amended) A system as claimed in claim 18, wherein the at least one suction pod comprises a plurality of suction pods, a suction region being defined within each suction pod, the support structure extending through a plurality of suction regions~~defining a respective suction region.~~

22. (Currently Amended) A system as claimed in claim 18, wherein the ~~suction device~~ includes a suction line is configured to be connected to a suction source ~~and at least one aperture that connects the suction line to the at least one suction pod.~~

23. (Previously Amended) A system as claimed in claim 18, wherein the suction device comprises a flexible suction device.

24. (Currently Amended) A system as claimed in claim 18, wherein the support structure of the electrophysiology device includes a plurality of fluid outlets, the at least one suction pod comprises a plurality of suction pods, each suction pod defining a respective suction region within a suction pod, and the electrophysiology device and suction device are respectively configured such that such the support structure extends through a plurality of suction regions and ~~that~~ each fluid outlet is within a respective suction region when the electrophysiology device is connected to the suction device.

25. (Original) A system as claimed in claim 18, wherein the at least one operative element comprises a plurality of spaced electrodes.

26. (Currently Amended) A system, comprising:

an electrophysiology device including a support structure and at least one operative element carried on the support structure; and

a suction device including a main body, a suction line extending through the main body, at least one suction pod defining a bottom surface~~and~~, a suction region being defined within the at least one suction pod, and a connector that removably secures the support structure of the electrophysiology device to the suction device; wherein the electrophysiology device and suction device are respectively configured such that the support structure extends through the suction region, and a portion of the electrophysiology device within the suction region extends below the bottom surface of the suction pod when the electrophysiology device is connected to the suction device.

27. (Canceled).

28. (Original) A system as claimed in claim 26, wherein the electrophysiology device and connector are configured such that the portion of the electrophysiology device extends about 0.5 mm below the bottom surface of the suction pod when the electrophysiology device is connected to the suction device.

29. (Currently Amended) A system as claimed in claim 26, wherein the at least one suction pod comprises a plurality of suction pods, a suction region being defined within each suction pod, the support structure extending through a plurality of suction regions~~defining a respective suction region.~~

30. (Currently Amended) A system as claimed in claim 26, wherein the ~~suction device~~ includes a suction line is configured to be connected to a suction source ~~and at least one aperture that connects the suction line to the at least one suction pod.~~

31. (Original) A system as claimed in claim 26, wherein the suction devices comprises a flexible suction device.

32. (Original) A system as claimed in claim 26, wherein the at least one operative element comprises a plurality of spaced electrodes.

33. (Currently Amended) A system, comprising:

an electrophysiology device including a support structure and at least one operative element carried on the support structure; and

a suction device including

a main body, a suction line extending through the main body,

two longitudinally spaced suction pods, a suction region being defined within each suction pod and being connected to the suction line through a suction aperture defined by a suction pod, and

a connector configured to removably secure the electrophysiology device to the suction device;

wherein the electrophysiology device and suction device are respectively configured such that the support structure extends through the suction regions, and a substantial majority of the operative element is between the suction regions of respective suction pods when the electrophysiology device is connected to the suction device.

34. (Currently Amended) A system as claimed in claim 33, ~~wherein the suction device includes a~~ the suction line being configured to be connected to a suction source ~~and two apertures that respectively connecting the suction line to the two suction pods.~~

35. (Original) A system as claimed in claim 33, wherein the suction device comprises a flexible suction device.

36. (Currently Amended) A system as claimed in claim 33, wherein the support structure of the electrophysiology device includes a plurality of longitudinally spaced operative elements supported on a support body and the electrophysiology device and suction device are respectively configured such that respective portions of the support body between the longitudinally spaced operative elements are aligned with suction regions defined by the suction pods when the electrophysiology device is connected to the suction device.

37. (Original) A system as claimed in claim 33, wherein the plurality of longitudinally spaced operative elements comprises a plurality of longitudinally spaced electrodes.

38. (Original) A system as claimed in claim 33, further comprising: a suction source adapted to be operably connected to the suction device.

39. (Currently Amended) A method of operating an electrophysiology device, the electrophysiology device including a support structure carrying, at least one operative element ~~carried on the support structure~~, and defining an internal fluid lumen and a least one fluid outlet, the method comprising the steps of:

securing a portion of the support structure to tissue with a suction device such that the support structure extends through a suction region of the suction device;

supplying cooling fluid ~~to~~ through the internal fluid lumen of the support structure; and

drawing fluid from the at least one fluid outlet of the support structure and into the suction device.

40. (Original) A method as claimed in claim 39, wherein the step of removably securing the suction device to the electrophysiology device comprises creating an interference fit between the suction device and the electrophysiology device.

41. (Original) A method as claimed in claim 39, further comprising the step of: performing at least one of a diagnostic and a therapeutic procedure after the support structure is secured to tissue with the suction device.

42. (Currently Amended) A method as claimed in claim 39, wherein the support structure of the electrophysiology device includes a plurality of fluid outlets; and the step of drawing fluid comprises drawing fluid from each fluid outlet of the plurality of fluid outlets into the suction device.

43. (Currently Amended) ~~A method as claimed in claim 39, further comprising the step of:~~
A method of operating an electrophysiology device, the electrophysiology device including a support structure, at least one operative element carried on the support structure, a fluid lumen and a fluid outlet, the method comprising the steps of:
securing a portion of the support structure to tissue with a suction device;
supplying cooling fluid to the fluid lumen;
drawing fluid from the fluid outlet into the suction device; and
vaporizing the fluid.
44. (Original) A method as claimed in claim 39, further comprising the step of: removing the fluid drawn into the suction device from a patient.